

Notice of Allowability

Application No.

10/623,584

Examiner

F. Daniel Lopez

Applicant(s)

TAKADA ET AL.

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 11-13.
3. ☒ The drawings filed on 22 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 10/24/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date ____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

REASONS FOR ALLOWANCE

The following is an Examiner's Statement of Reasons for Allowance: the combination of elements as claimed is deemed to be directed to an unobvious improvement over the prior art as shown by Okada (4,891,943) and Horton et al. Okada (4,891,943) discloses a hydrostatic transmission comprising: a center section (2, 3) having a hydraulic pump having a cylinder block (10) rotatably, slidably mounted a horizontal surface (2d) and a hydraulic motor having a cylinder block (11) rotatably, slidably mounted on a vertical surface (3c) disposed in a housing (1); a first pair of arcuate ports (3a, 3b) opening on the vertical surface and communicating with a pair of oil passages (2a, 2b) provided in the center section; a second pair of arcuate ports (2e, 2f) opening on the horizontal surface, wherein each of the second pair of arcuate ports has a length and a depth substantially perpendicular to each other, wherein the depth of each of the second pair of arcuate ports is shallow at a first end and deepens (by holes 2a', 2b', e.g. fig 3) at a second end which fluidly communicates with a respective one of the pair of oil passages whereby feed oil discharged from the cylinder block of the hydraulic pump is introduced into one of said pair of oil passages and feed discharge oil in the other of said pair of oil passages from the cylinder block of the hydraulic motor is introduced into said cylinder block of the hydraulic pump; oil holes (in sleeve 33) branched from the pair of oil passages and opening to a single discharge hole (2c) on an opposite surface of the center section opposite to the horizontal surface; an oil filter (8) disposed in an oil sump so that the oil filter divides the oil sump into an inner oil sump and an outer oil sump, wherein check valves (26, 27, respectively) in respective oil holes directly communicates with said inner oil sump, through the single discharge hole. This improvement comprises the depth of each of the second pair of arcuate ports gradually deepens from the first end to the second end.

Horton teaches, for a hydrostatic transmission comprising: a center section (50) having a hydraulic pump (57) having a cylinder block rotatably, slidably mounted on a horizontal surface and a hydraulic motor having a cylinder block rotatably, slidably mounted on another surface disposed in a housing; a pair of oil passages provided in

Art Unit: 3745

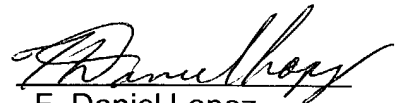
the center section between the pump and the motor; oil holes branched from the pair of oil passages for check valves (82), therein; an oil filter (unmarked in fig 11) disposed in an oil sump so that the oil filter divides the oil sump into an inner oil sump and an outer oil sump, wherein the check valves directly communicates with said inner oil sump; that the oil passages open on an opposite surface of the center section opposite to the horizontal surface; with a valve casing inserted into each of the oil holes, wherein an outer portion of each of the valve casings projects from the opposite surface of the center section to an oil sump; a valve body inserted into each of the valve casings; and with openings provided in the respective projecting outer portions of the valve casings closed by the respective valve bodies and are freely opened and closed.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, preferably **accompanies** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (703) 308-0008. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on (703) 308-1044. The fax number for this group is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.



F. Daniel Lopez
Primary Examiner
Art Unit 3745
October 15, 2004